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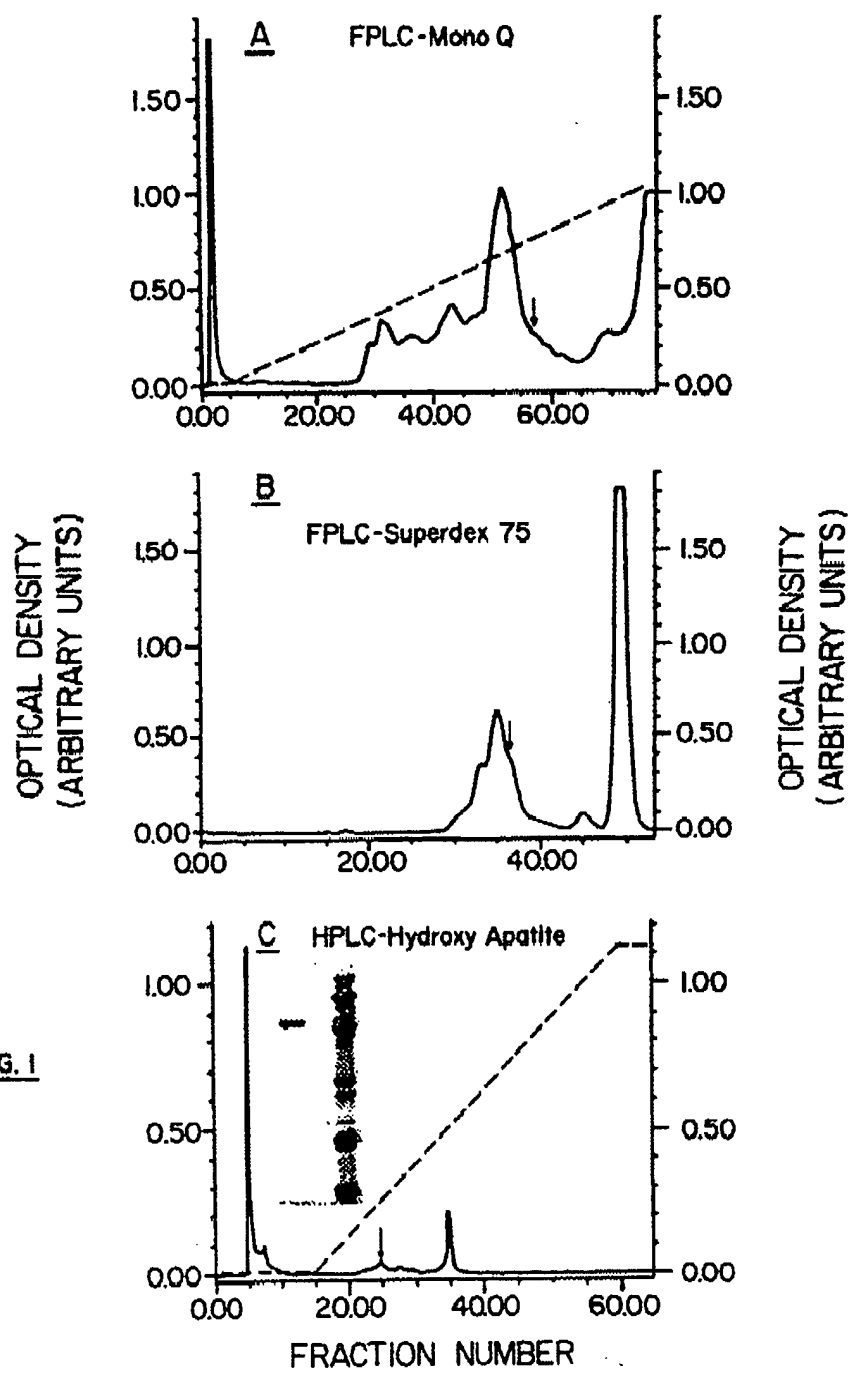


FIG. 1

1 MERASCLLLL LLPLVHVSAT TPEPCELDDE DFRCVCNFSE PQPDWSEAFQ  
 D -?--?--NN? ??-?-?

51 CVSAVEVEIH AGGENCEPFL KRVDADADPR QYADTVKALR VRRITVGAAQ  
 V-----?S ---LSL?

101 VPAQLLVGAL RVLAYSRLKE LTLEDLKITG TMPPLPLEAT GLALSSLRLR

151 NVSWATGRSW LAELQQWLKP GLKVLSIAQA HSPAFSYEQV RAFPALTSLD  
 ?---?---GA? -G---

201 LSDNPGLGER GLMAALCPNK FPAIQNLALR NTGMETPTGV CAALAAAGVO  
 ---S-P A-----LR--

251 PHSLDLSHNS LRATVNPSAP ROMWSSALNS LNLSFAGLEQ VPKGLPAKLR  
 -Q-----? -?V?

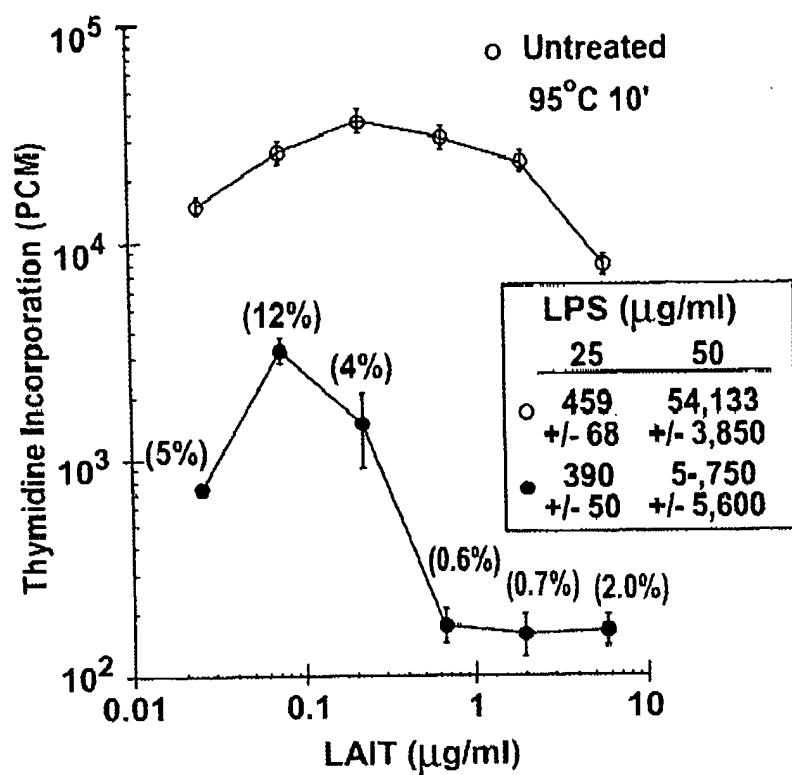
301 VLDLSCNRLN RAPQPDELPE VDNLTLDGNP FLVPGTALPH EGSMNSGVVP  
 L-----V

351 ACARSTLSVG VSGTLVLLQG ARGFA  
 ???--

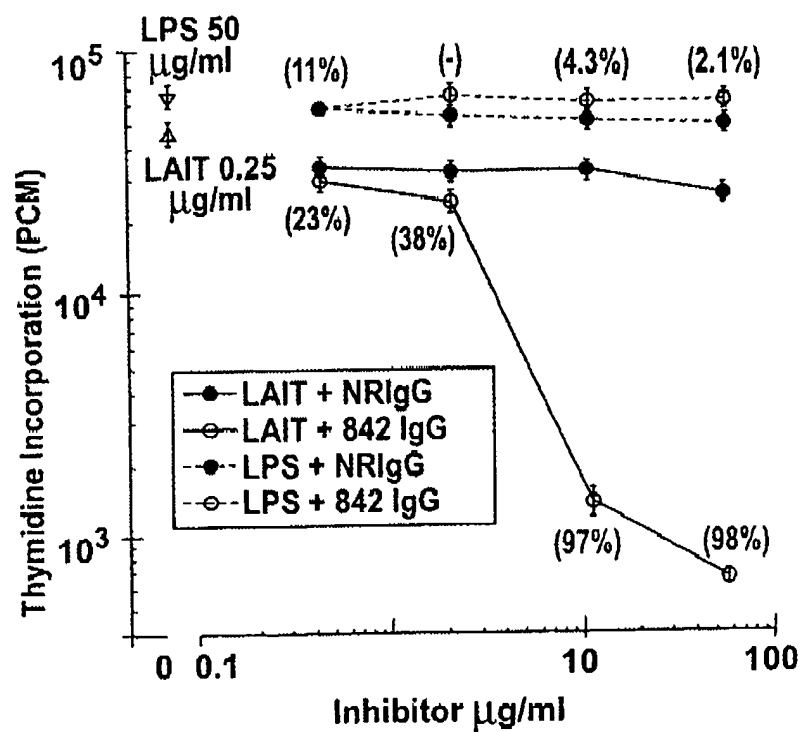
**FIG. 2**



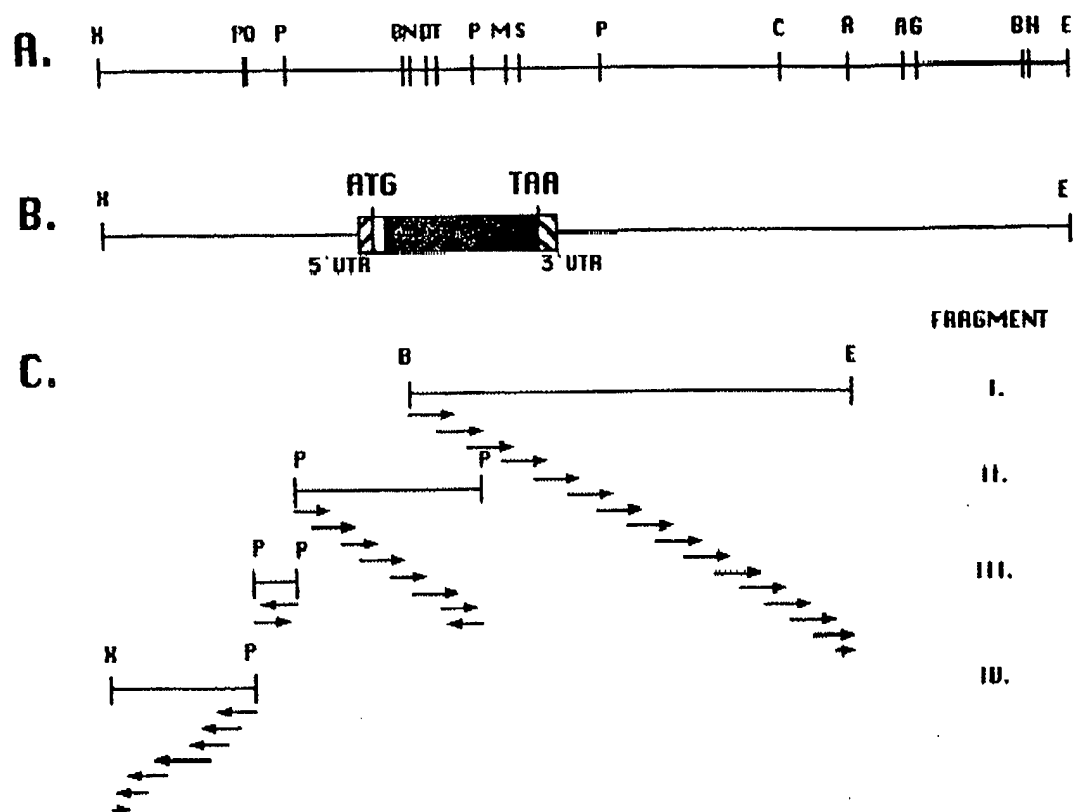
FIG. 3



**FIG. 4A**



**FIG. 4B**



**FIG. 5**

**FIG. 6 A**

Majority G C C G A C C C G X G G C A G T A T G C T G A C A C X A T C A A G  
240 250 260

Bovine CD14 cDNA A C C A A C C C G A A G C A G T A T G C T G A C A C A A T C A A G 258  
Human CD14 cDNA G C C G A C C C G C G G C A G T A T G C T G A C A C G G T C A A G 261  
Mouse CD14 cDNA G C A G A T C T G G G G C A G T T C A C T G A T A T T A T C A A G 249

Majority G C T C T G C G C G T X C G G C G G C T C A C G G T G G G X G C C  
270 280 290

Bovine CD14 cDNA G C T C T G C G C G T T C G G C G A C T C A A G C T G G G C G C T 291  
Human CD14 cDNA G C T C T C G C G T G C G G C G G C T C A C A G T G G G A G C C 294  
Mouse CD14 cDNA T C T C T G T C C T T A A A G C G G C T T A C G G T G C G G G C C 282

Majority G C A C A G G T T C C T G C T C A G C T T C T G G T C G G C G C C  
300 310 320 330

Bovine CD14 cDNA G C A C A G G T T C C T G C T C A G C T T C T G G T C G C C G T T 324  
Human CD14 cDNA G C A C A G G T T C C T G C T C A G G T A C T G G T A G G C G C C 327  
Mouse CD14 cDNA G C G C G G A T T C C T A G T C G G A T T C T A T T C G G A G C C 315

Majority C T G C G T G T G C T C G G G T A C T C C C G C C T C A A G G A A  
340 350 360

Bovine CD14 cDNA C T G C G C G C G C T C G G G T A C T C T C G T C T C A A G G A A 357  
Human CD14 cDNA C T G C G T G T G C T A G C G T A C T C C C G C C T C A A G G A A 360  
Mouse CD14 cDNA C T G C G T G T G C T C G G G A T T T C C G G C C T C A G G A A 348

Majority C T G A C G C T T G A G G A C C T X G A G G T A A C C G G C A C C  
370 380 390

Bovine CD14 cDNA C T G A C G C T T G A G G A C C T G G A G G T A A C C G G C C A 390  
Human CD14 cDNA C T G A C G C T C G A G G A C C T A A A G A T A A C C G G C A C C 393  
Mouse CD14 cDNA C T G A C T C T T G A A A A T C T C G A G G T A A C C G G C A C C 381

Majority A C G C C X C C G C C G C C T C T G G A A G C C A C X G G A C C T  
400 410 420

Bovine CD14 cDNA A C G C C C C G A C G C C T C T G G A A G C C G C T G G G C C T 423  
Human CD14 cDNA A T G C C T C C G C T G C C T C T G G A A G C C A C A G G A C T T 426  
Mouse CD14 cDNA G C G C G C C A C C G C T T C T G G A A G C C A C C G G A C C C 414

Majority G C X C T C A C C A X C T T G A G C C T X C G C A A C G T G T C G  
430 440 450 460

Bovine CD14 cDNA G C G C T C A C C A C C C T C A G T C T G C G T A A C G T A T C G 456  
Human CD14 cDNA G C A C T T T C A G C T T G C G C C T A C G C A A C G T G T C G 459  
Mouse CD14 cDNA G A T C T C A A C A T C T T G A A C C T C C G C A A C G T G T C G 447

FIG. 6 B



Majority TGGGCAACAGGGGGTGCCTGGCTCGCCGAAGTCTG

470 480 490

Bovine CD14 cDNA TGGGCAACAGGAGGTGCCTGGCTCGCGAAGTCTG 489

Human CD14 cDNA TGGGCGACAGGGCGTCTTGGCTCGCCGAGCTG 492

Mouse CD14 cDNA TGGGCAACAAAGGATGCCTGGCTCGCGAAGTCTG 480

Majority CAGCAGTGGCTCAAGCCTGGXCTCAAGGTACTG

500 510 520

Bovine CD14 cDNA CAGCAGTGGCTCAAGCCTGGGCTCAAGGCTGCTG 522

Human CD14 cDNA CAGCAGTGGCTCAAGCCAGGCCCTCAAGGTACTG 525

Mouse CD14 cDNA CAGCAGTGGCTAAAGCCTGGACTCAAGGTACTG 513

Majority AGCATTGCCCCAAGCACACTCGCTTGGCCTTTTCC

530 540 550 560

Bovine CD14 cDNA AACATTGCCCCAAGCACACTCGCTTGGCCTTTTCCG 555

Human CD14 cDNA AGCATTGCCCCAAGCACACTCGCTTGGCCTTTTCC 558

Mouse CD14 cDNA AGTATTGCCCCAAGCACACTCACTCAACTTTTCC 546

Majority TGGGAACAGGTCCGCGCCTTCCCGGCCCTCACC

570 580 590

Bovine CD14 cDNA TGGGCAAGGCTCTTCAACCTTCGAGGCGCTCACC 588

Human CD14 cDNA TGGGAACAGGTTTCGCGCCTTCCCGGCCCTTACC 591

Mouse CD14 cDNA TGGGAACAGGTCCGCGCTTCTTCCCTGCCCCCTCC 579

Majority ACCCTAGACCTGTCTGACAATCCTGGACTGGGC

600 610 620

Bovine CD14 cDNA ACCCTAGACCTGTCTGACAATCCAGTCTCTCGGC 621

Human CD14 cDNA AGCCTAGACCTGTCTGACAATCCTGGACTGGGC 624

Mouse CD14 cDNA ACCCTAGACCTGTCTGACAATCCTGAATTGGGC 612

Majority GAXACGXGGACTGATGGCAGCTCTCTGTCCCCA

630 640 650 660

Bovine CD14 cDNA GACACG-GGGCTGATGGCAGCTCTCTGTCCGA 653

Human CD14 cDNA GA-ACGCGGACTGATGGCGGCTCTCTGTCCCCA 656

Mouse CD14 cDNA GAGA-GAGGACTGATCTCAGGCTCTCTGTCCCC 644

Majority CAAGTTCCCGGCCCTCCAAXATCTAGCGCTGCG

670 680 690

Bovine CD14 cDNA CAAGTTCCCGGCCCTCCAATATCTAGCGCTACG 686

Human CD14 cDNA CAAGTTCCCGGCCATCCAAGAAATCTAGCGCTGCG 689

Mouse CD14 cDNA CAAGTTCCCGACCCCTCCAAGTTTCTAGCGCTGCG 677

FIG. 6 C

Majority C A A C G C G G G G A T G G A G A C G C C C A G C G G C G T G T G

700 710 720

Bovine CD14 cDNA C A A C G C G G G G A T G G A G A C G C C C A G C G G C G T G T G 719

Human CD14 cDNA C A A C A C A G G A A T G G A G A C G C C C A C A G G C G T G T G 722

Mouse CD14 cDNA T A A C G C G G G G A T G G A G A C G C C C A G C G G C G T G T G 710

Majority C G C X G C G C T G G C G G C A G C A A G G G T G C A G C C C C A

730 740 750

Bovine CD14 cDNA C G C G G C G C T G G C G G C A G C G A G G G T G C A G C C C C A 752

Human CD14 cDNA C G C C G C A C T G G C G G C G G C A G G T G T G C A G C C C C A 755

Mouse CD14 cDNA C T C T G C G C T G G C C G C A G C A A G G G T A C A G C T G C A 743

Majority A A G C C T A G A C C T C A G C C A C A A C T C G C T G C G C G X

760 770 780 790

Bovine CD14 cDNA A A G C C T G G A C C T C A G C C A C A A C T C G C T G C G C G T 785

Human CD14 cDNA C A G C C T A G A C C T C A G C C A C A A C T C G C T G C G C G C 788

Mouse CD14 cDNA A G G A C T A G A C C T T A G T C A C A A T T C A C T G C G G G A 776

Majority C A C C G C A - - C C C X G G C G C T C C G A G A T G T G T C T G

800 810 820

Bovine CD14 cDNA C A C C G C - - C C C G G T G C T A C C G A T G T G T C T G 815

Human CD14 cDNA C A C C G T A A A C C C T A G C G C T C C G A G A T G C A T G T G 821

Mouse CD14 cDNA T G C T G C A - - - - G G C G C T C C G A G T T G T G A C T G 803

Majority G C C C A G T G C X C T A A A C T C X C T C A A T C T G T C G T T

830 840 850

Bovine CD14 cDNA G C C C A G T G C A C T A A G G T C T C T C A A T T T G T C G T T 848

Human CD14 cDNA G T C C A G C G C C T G A A C T C C C T C A A T C T G T C G T T 854

Mouse CD14 cDNA G C C C A G T C A G C T A A A C T C G C T C A A T C T G T C T T T 836

Majority C G C T G G G C T G G A G C A G G T G C C T A A A G G A C T G C C

860 870 880 890

Bovine CD14 cDNA C G C T G G G C T G G A G C A A G T G C C T A A G G G A C T G C C 881

Human CD14 cDNA C G C T G G G C T G G A A C A G G T G C C T A A A G G A C T G C C 887

Mouse CD14 cDNA C A C T G G G C T G A A G C A G G T A C C T A A A G G G C T G C C 869

Majority A G C C A A G C T C A G C G T G C T X G A T C T C A G C T G C A A

900 910 920

Bovine CD14 cDNA C C C T A A G C T C A G C G T G C T T G A T C T C A G C T G C A A 914

Human CD14 cDNA A G C C A A G C T C A G A G T G C T C G A T C T C A G C T G C A A 920

Mouse CD14 cDNA A G C C A A G C T C A G C G T G C T G G A T C T C A G T T A C A A 902

FIG. 6 D

Majority C A G G C T G A A C A G G G A G C C G C G G C C A G A C G A G C T

930 940 950

Bovine CD14 cDNA C A A G C T A A G C A G G G A G C C G C G G C C A G A C G A G C T 947

Human CD14 cDNA C A G A C T G A A C A G G G C G C C G C A G C C T G A C G A G C T 953

Mouse CD14 cDNA C A G G C T G G A T A G G A A C C C T A G C C C A G A T G A G C T 935

Majority G C C C G A G G T G G A T A A C C T G A C A C T G G A C G G A A A

960 970 980 990

Bovine CD14 cDNA G C C C G A G G T A A A T G A C C T G A C T C T G G A C G G A A A 980

Human CD14 cDNA G C C C G A G G T G G A T A A C C T G A C A C T G G A C G G G A A 986

Mouse CD14 cDNA G C C C C A A G T G G G G A A C C T G T C A C T T A A A G G A A A 968

Majority T C C C T T T C T G G A C C C T G G A X C X X T C C X X C X C C A

1000 1010 1020

Bovine CD14 cDNA T C C C T T T C T G G A C C C T G G A G C C C T C C A G C A C C A 1013

Human CD14 cDNA T C C C T T C C T G G T C C C T G G A A C T G C C C T C C C C C A 1019

Mouse CD14 cDNA T C C C T T T T G G A C T C T G A A - - - T C C C A C - T C G 996

Majority X A A X G G C T C A A T G A X C T C C G G C G T G G T C C C A G C

1030 1040 1050

Bovine CD14 cDNA A A A T G A C C C G A T G A T C T C C G G C G T G G T C C C A G C 1046

Human CD14 cDNA C G A G G G C T C A A T G A A C T C C G G C G T G G T C C C A G C 1052

Mouse CD14 cDNA G A G A A G T T T A A - - - C T C T G G C G T A G T C A C C G C 1025

Majority C T G T G C X C G T T C X X C C C T G X C X G T G G G G G T G T C

1060 1070 1080

Bovine CD14 cDNA C T G T G C G C G T T C T G C C C T T G A C C A T G G G G G T G T C 1079

Human CD14 cDNA C T G T G C A C G T T C G A C C C T G T C G G T G G G G G T G T C 1085

Mouse CD14 cDNA G G G A G C T C C A T C A T C C C A A G C A G T G G C C T T G T C 1058

Majority A G G A A C C C T G G C G C T G C T C C A A G G A G C C C G X G G

1090 1100 1110 1120

Bovine CD14 cDNA A G G A G C C C T G G C G C T G C T T C A A G G A G C C C G A G G 1112

Human CD14 cDNA G G G A A C C C T G G T G C T G C T C C A A G G G G C C C G G G G 1118

Mouse CD14 cDNA A G G A A C T C T G G C T T T G C T C C T A G G A G A T C G C C T 1091

Majority C T T T G C X T A A

1130

Bovine CD14 cDNA C T T C G C G T A A 1122

Human CD14 cDNA C T T T G C C T A A 1128

Mouse CD14 cDNA C T T G T T A A 1101

FIG. 6 E

Majority M E R V X X L L L L L L P - L V H V S A X T P E P C E L D D E D F R C

10 20 30

Bovine CD14 M V C V P Y L L L L L L P S L L R V S A D T T E P C E L D D D F R C 35

Human CD14 M E R A S C L L L L L L P - L V H V S A T T P E P C E L D D E D F R C 34

Mouse CD14 M E R V L G L L L L L L - - - V H A S P A P P E P C E L D E E S - - C 30

Majority V C N F S D P K P D W S S A F Q C X X A V E V E I X A G G R S L E X F

40 50 60 70

Bovine CD14 V C N F T D P K P D W S S A V Q C M V A V E V E I S A G G R S L E Q F 70

Human CD14 V C N F S E P Q P D W S E A F Q C V S A V E V E I H A G G L N L E P F 70

Mouse CD14 S C N F S D P K P D W S S A F N C L G A A D V E L Y G G R S L E Y L 65

Majority L K R V D A D A D P X O Y A D T I K A L R V R R L T V G A A Q V P A Q

80 90 100

Bovine CD14 L K - - G A D T N P K Q Y A D T I K A L R V R R L K L G A A Q V P A Q 103

Human CD14 L K R V D A D A D P R Q Y A D T V K A L R V R R L T V G A A Q V P A Q 104

Mouse CD14 L K R V D T E A D L G D F T D I T K S L S L K R L T V R A A R I P S R 100

Majority L L V G A L R V L G Y S R L K E L T L E D L E V T G T X P P X P L E A

110 120 130 140

Bovine CD14 L L V A V L R A L G Y S R L K E L T L E D L E V T G T P P T P L E A 138

Human CD14 L L V G A L R V L A Y S R L K E L T L E D L K I T G T M P P L P L E A 139

Mouse CD14 I L F G A L R V L G T S G L Q E L T L E N L E V T G T A P P P L L E A 135

Majority T G P A L X X L X L R N V S W A T G X A W L A E L Q Q W L K P G L K V

150 160 170

Bovine CD14 A G P A L T T L S L R N V S W T T G G A W L G E L Q Q W L K P G L R V 173

Human CD14 T G L A L S S L R L R N V S W A T G R S W L A E L Q Q W L K P G L K V 174

Mouse CD14 T G P D I N I L N L R N V S W A T R D A W L A E L Q Q W L K P G L K V 170

Majority L S I A Q A H S L A F S C E O V R X F P A L T T L D L S D N P X L G E

180 190 200 210

Bovine CD14 L N I A Q A H S L A F P C A G L S T F E A L T T L D L S D N P S L G D 208

Human CD14 L S I A Q A H S P A F S Y E Q V R A F P A L T S L D L S D N P G L G E 209

Mouse CD14 L S I A Q A H S L N F S C E O V R V F P A L S T L D L S D N P E L G E 205

Majority R G L M A A L C P X K F P A L Q X L A L R N A G M E T P S G V C A A L

220 230 240

Bovine CD14 T G L M A A L C P N K F P A L Q Y L A L R N A G M E T P S G V C A A L 243

Human CD14 R G L M A A L C P H K F P A I Q N L A L R N T G M E T P T G V C A A L 244

Mouse CD14 R G L T S A L C P L K F P T L Q V L A L R N A G M E T P S G V C S A L 240

FIG. 7 A

Majority	A A A R V Q P Q S L D L S H N S L R X T - A P G A P R C X W P S A L N																																			
	250					260					270					280																				
Bovine CD14	A	A	A	R	V	Q	P	Q	S	L	D	L	S	H	N	S	L	R	V	T	-	A	P	G	A	T	R	C	V	W	P	S	A	L	R	277
Human CD14	A	A	A	G	V	Q	P	H	S	L	D	L	S	H	N	S	L	R	A	T	V	N	P	S	A	P	R	C	M	W	S	S	A	L	N	279
Mouse CD14	A	A	A	R	V	Q	L	Q	G	L	D	L	S	H	N	S	L	R	D	A	-	A	-	G	A	P	S	C	D	W	P	S	Q	L	N	273
Majority	S L N L S F A G L E Q V P K G L P A K L S V L D L S C N R L X R X P X																																			
	290					300					310																									
Bovine CD14	S	L	N	L	S	F	A	G	L	E	Q	V	P	K	G	L	P	P	K	L	S	V	L	D	L	S	C	N	K	L	S	R	E	P	R	312
Human CD14	S	L	N	L	S	F	A	G	L	E	Q	V	P	K	G	L	P	A	K	L	R	V	L	D	L	S	C	N	R	L	N	R	A	P	Q	314
Mouse CD14	S	L	N	L	S	F	T	G	L	K	Q	V	P	K	G	L	P	A	K	L	S	V	L	D	L	S	Y	N	R	L	D	R	N	P	S	308
Majority	P D E L P E V X N L T L D G N P F L D P G X X X H X X X M N S G V V																																			
	320					330					340					350																				
Bovine CD14	R	D	E	L	P	E	V	N	D	L	T	L	D	G	N	P	F	L	D	P	G	A	L	Q	H	Q	N	D	P	M	I	S	G	V	V	347
Human CD14	P	D	E	L	P	E	V	D	N	L	T	L	D	G	N	P	F	L	V	P	G	T	A	L	P	H	E	G	S	M	N	S	G	V	V	349
Mouse CD14	P	D	E	L	P	Q	V	G	N	L	S	L	K	G	N	P	F	L	D	-	-	S	E	S	H	S	E	K	F	N	S	G	V	V	340	
Majority	P A C A R S X L X V G V S G T L A L L O G A R G F A																																			
	360					370																														
Bovine CD14	P	A	C	A	R	S	A	L	T	M	G	V	S	G	A	L	A	L	L	O	G	A	R	G	F	A									373	
Human CD14	P	A	C	A	R	S	T	L	S	V	G	V	S	G	T	L	V	L	L	O	G	A	R	G	F	A									375	
Mouse CD14	T	A	G	A	P	S	S	Q	A	V	A	L	S	G	T	L	A	L	L	G	D	R	L	E	V										366	

FIG. 7 B

**A**

**Baculovirus expression system**

**Forward 5' - GCT AGC GCT AGC CAC CAT GGT GTG CGT GCC CTA CCT GCT - 3'**

**Reverse 5' - GCT AGC GCT AGC CGC GAA GCC TCG GGC TCC TTG AAG - 3'**

**B**

**Mammalian expression system**

**Forward 5' - CTC GAG CTC GAG GCT AGC CAC CAT GGT GTG CGT GCC - 3'**

**Reverse 5' - CTC GAGCTGAG GGA TCC CTA AGC GTA ATC TGG AAC - 3'**

**FIG. 8**

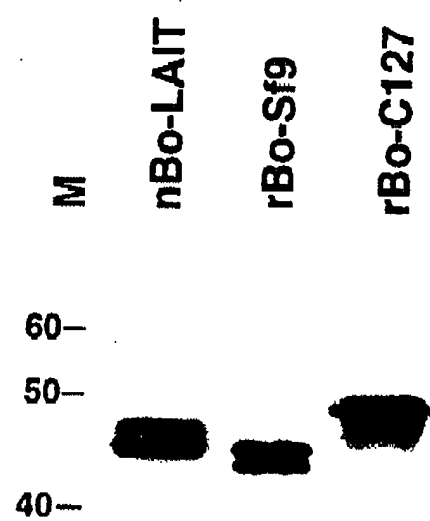


FIG. 9

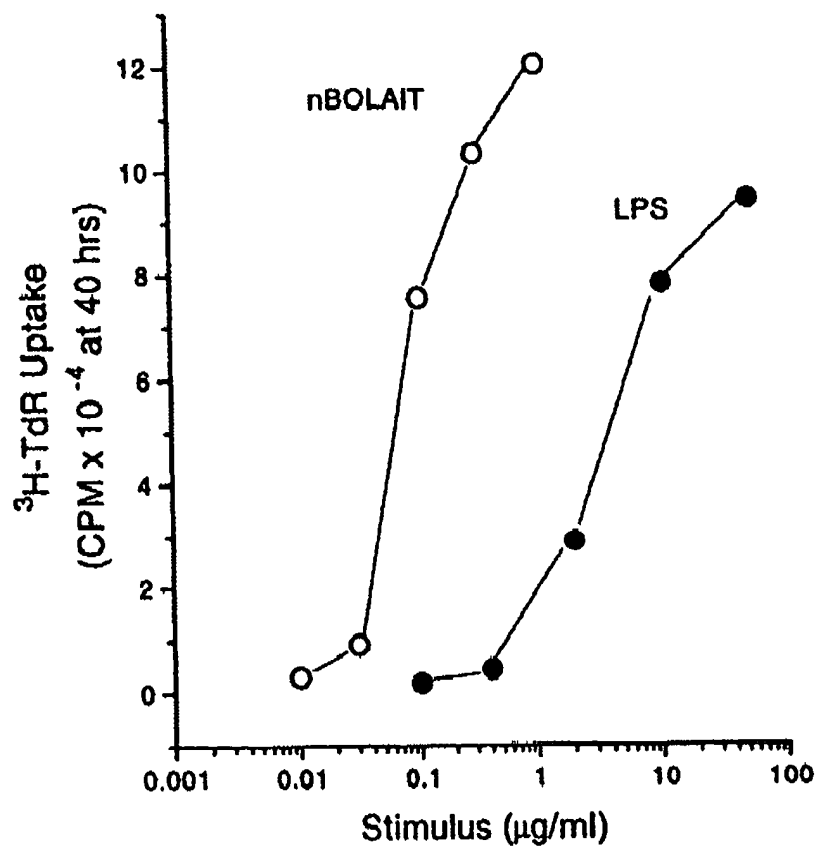


FIG. 10



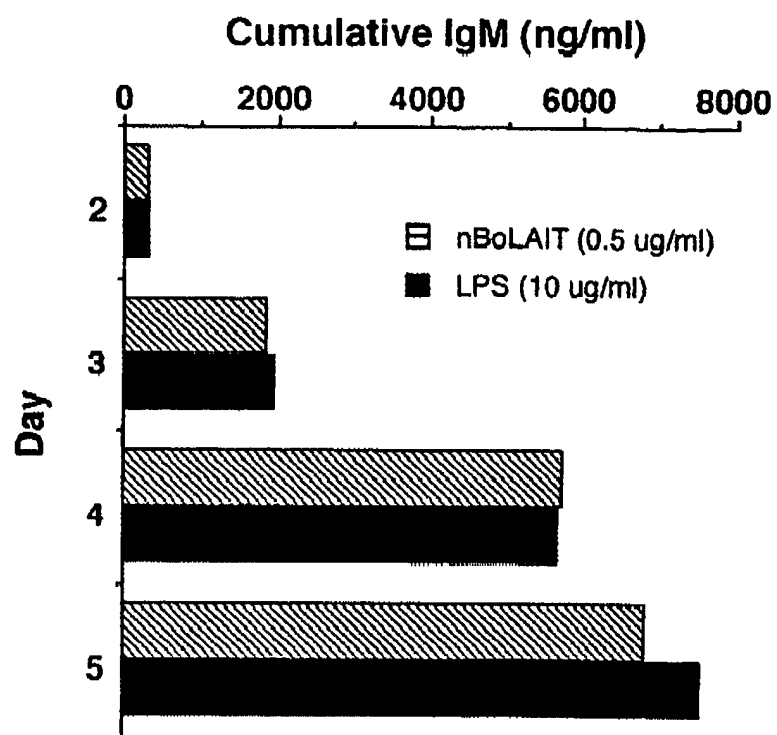


FIG. 11

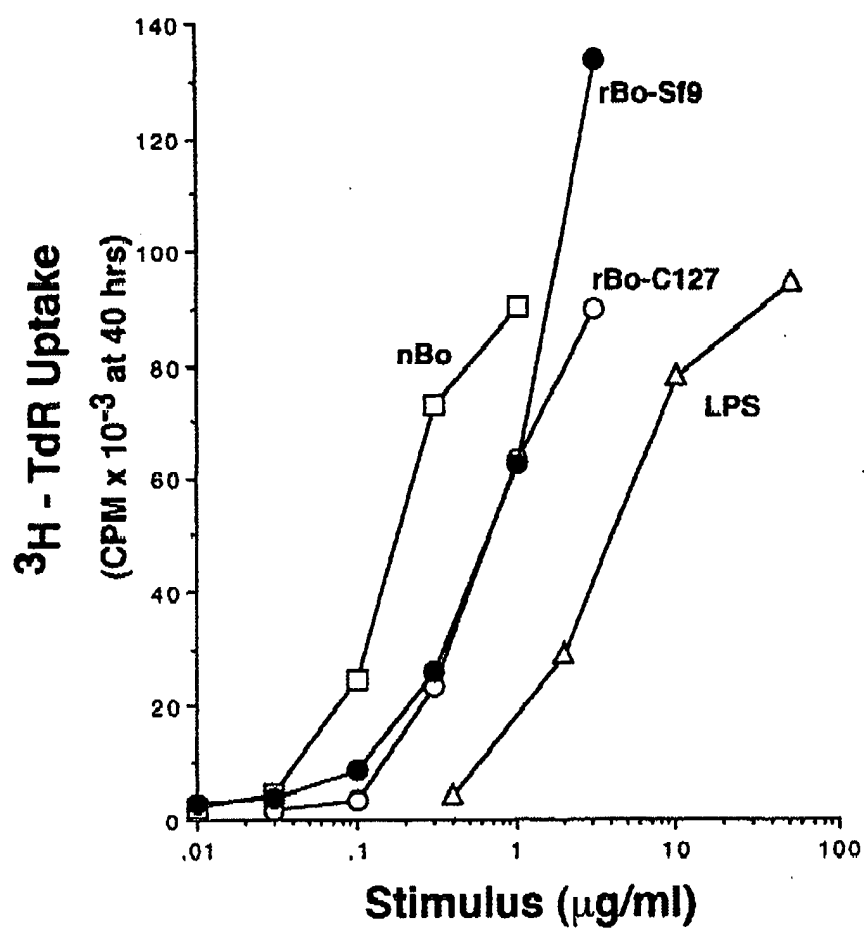
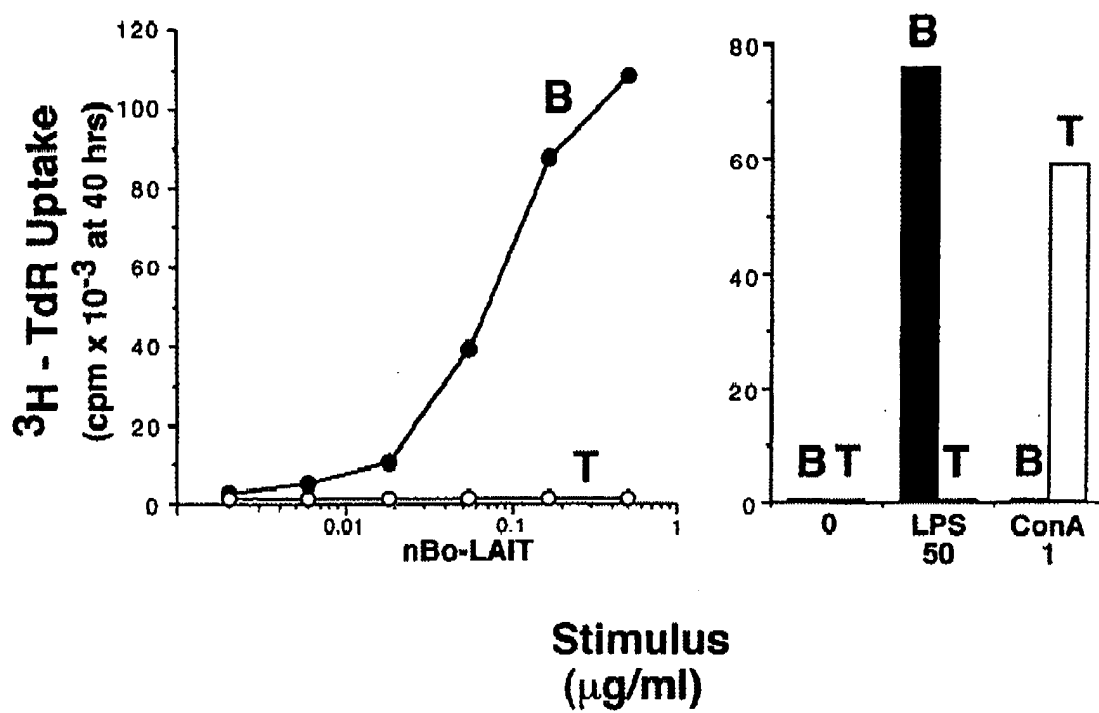
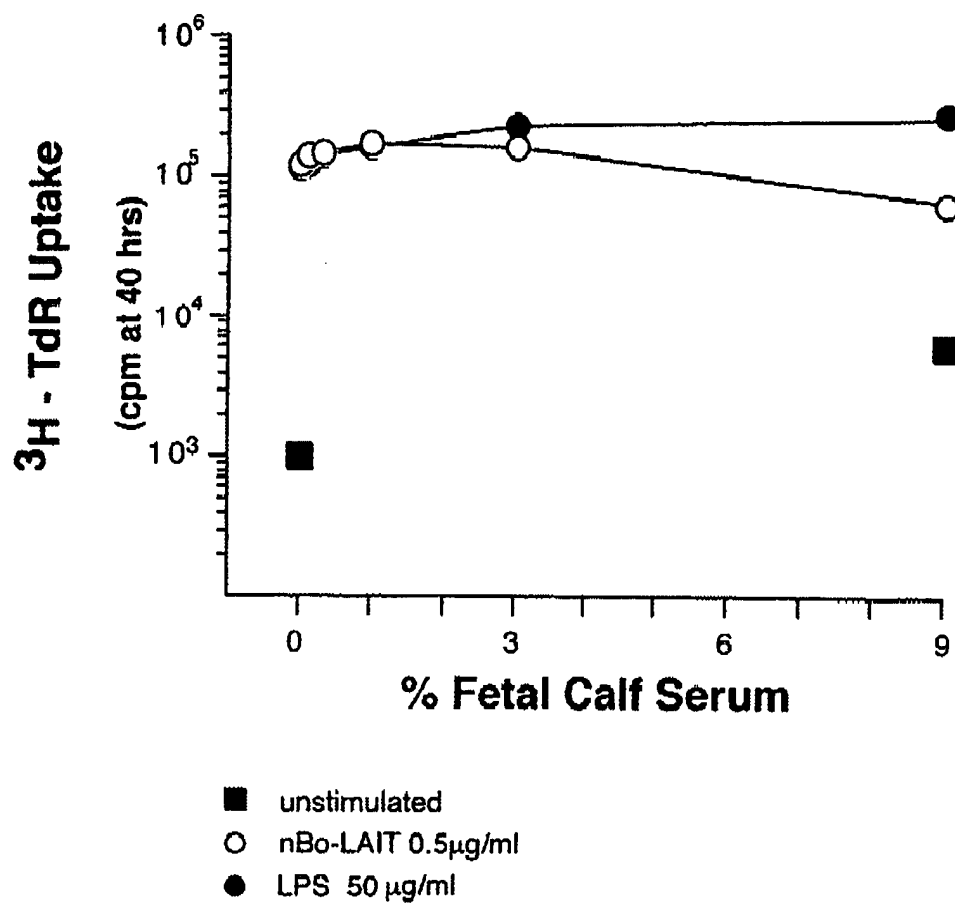


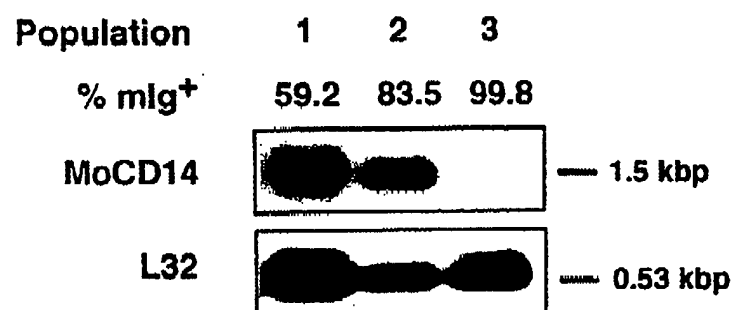
FIG. 12



**FIG. 13**

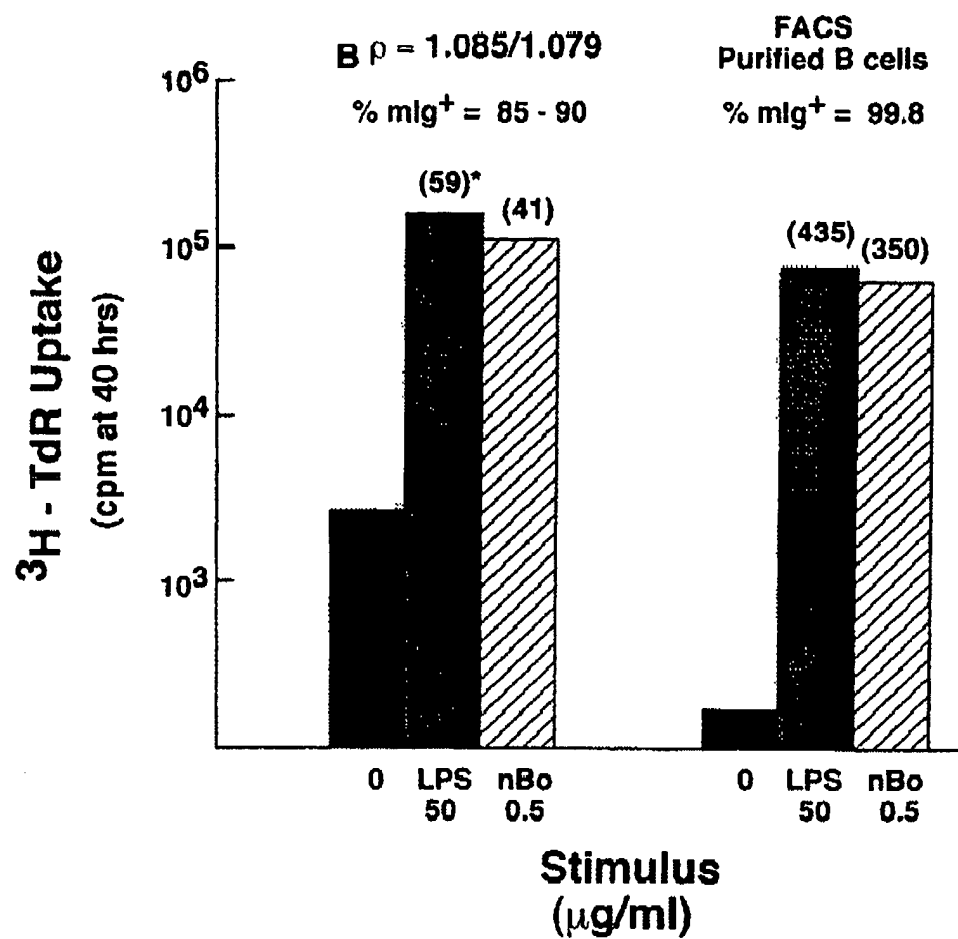


**FIG. 14**



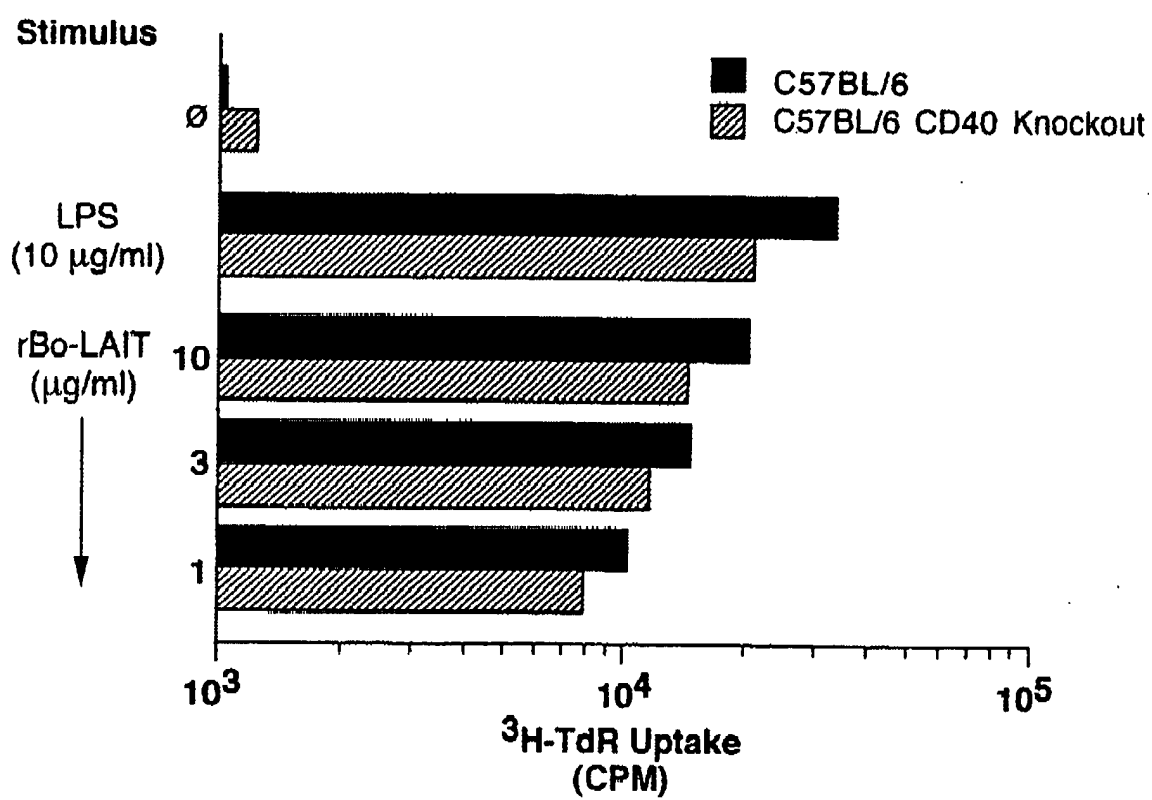
Populations: 1 - unfractionated splenocytes  
 2 - T-depleted,  $\rho=1.085/1.079$  splenocytes  
 3 - FACS purified mlg<sup>+</sup> B cells from population 2

**FIG. 15**

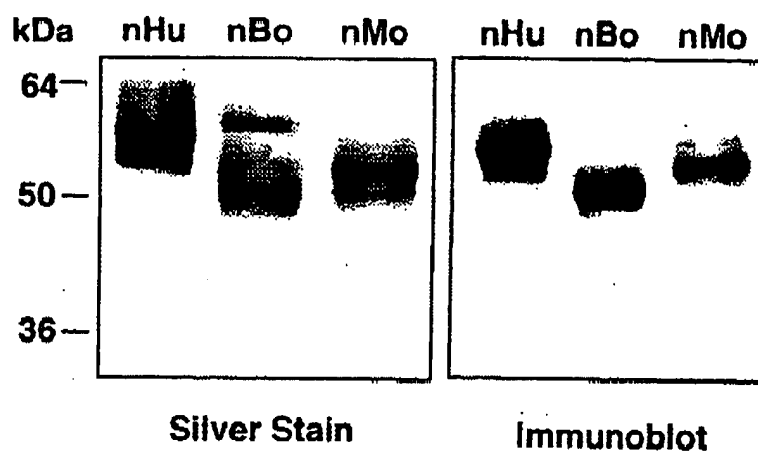


\* ( ) = index of stimulation

**FIG. 16**



**FIG. 17**

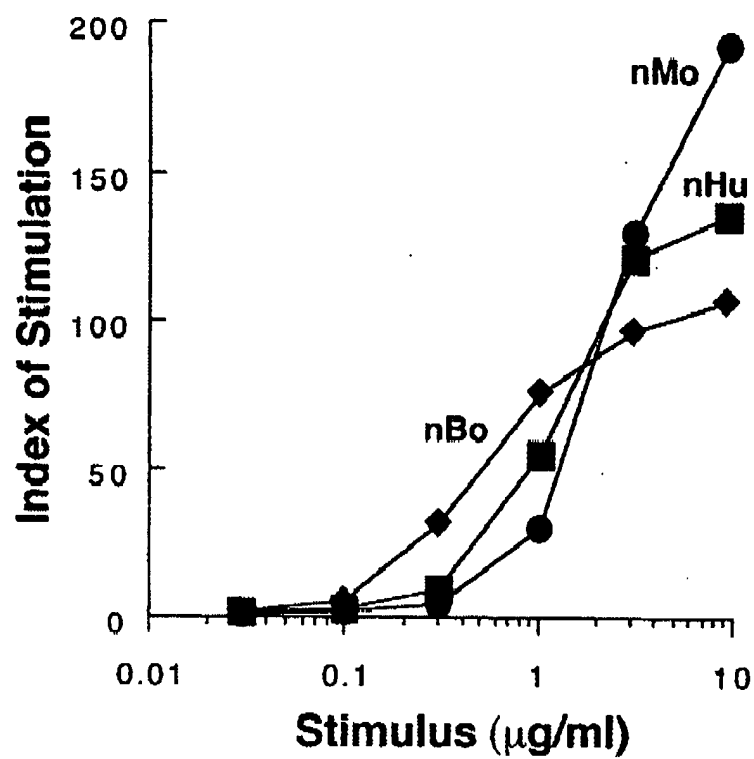


Derivation

nHu - urine from nephrotic patient  
nBo - colostrum  
nMo - OKT3-hybridoma supernatant

FIG. 18





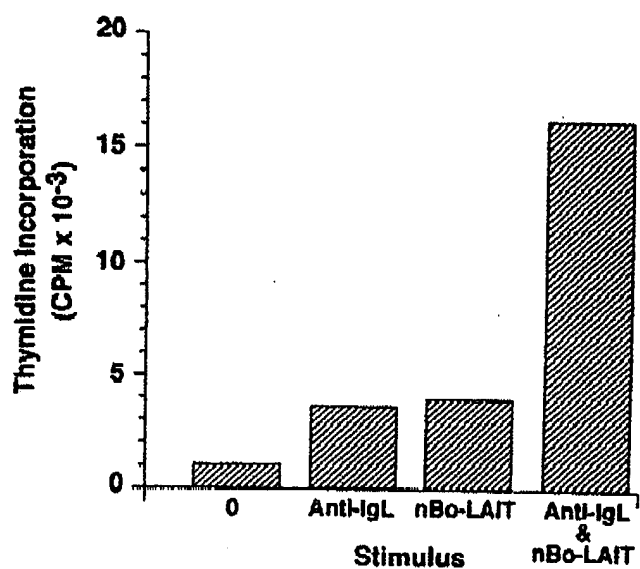
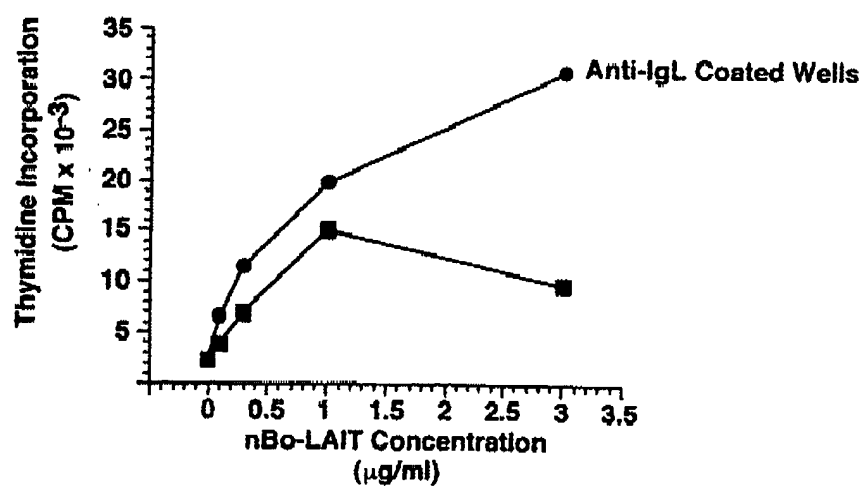
**Derivation**

nBo - colostrum

nHu - urine from nephrotic patients

nMo - OKT3-hybridoma supernatant

**FIG. 19**

**A. Cord B Cells****B. Tonsil B Cells****FIG. 20**

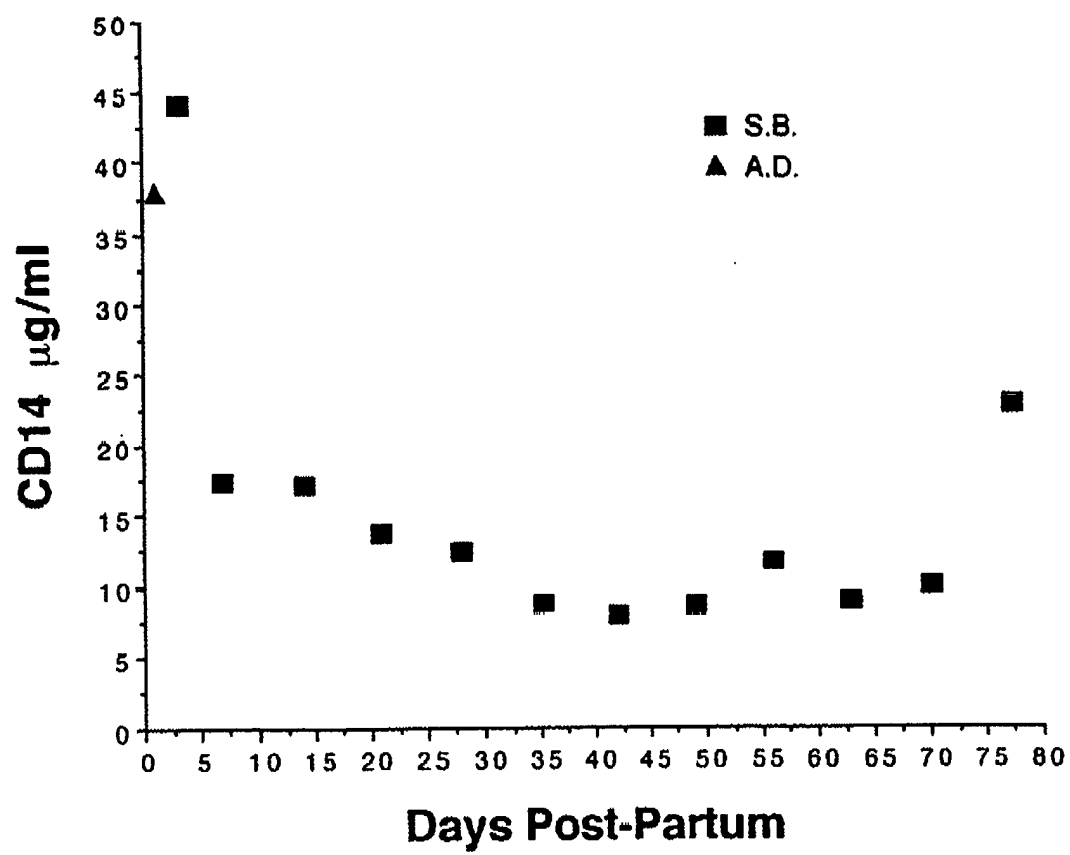


FIG. 21